

REMARKS

The Office Action dated November 1, 2006 has been carefully considered. Claims 104-112 and 114-140 are in this application. Claims 139-140 are new and are supported at substitute sheet page 70, lines 24-28.

Claim 104 is amended to change its grammatical structure.

Claim 105 is amended to correct antecedent basis. Claim 128 is amended to correct antecedent basis and grammatical structure.

Claim 116 was objected to as being dependent upon a canceled claim. Claim 116 is amended to correct the dependency and antecedent basis.

Claim 126 is amended. Support for the amended limitation is found at substitute page 15, lines 35-38, substitute page 17, lines 4-9 and substitute page 90, lines 18-19.

An objection to the drawings stated that Figure 22(f) is not shown in the drawings. Figure 22 actually has only drawings A-E. The specification has been amended to correct the references to the drawings.

35 U.S.C. § 112

Claims 105, 107, 137, and 138 were rejected under 35 USC 112, second paragraph, as being indefinite. The Examiner stated that the “at least one hollow protuberance” lacks antecedent basis. Claim 105 has been amended to substitute the phrase “enucleation penetration member” for “at least one hollow protuberance” in order to correct the antecedent basis. The antecedent basis is now correct for all the above-referenced dependent claims, as well.

35 U.S.C. § 102

The Examiner rejected claims 104-106 as being anticipated by U.S. Pat. No. 5,262,128 to Leighton et al. (US’128). Applicant traverses the rejection.

Claim 104 has been amended so that the statement of intended purpose is rewritten as a functional limitation of the pit component. Claim 104 recites that the substrate comprises at least one well and that the well comprises an enucleation pit wherein the pit has capability to hold a nucleus isolated from the cell. US ‘128 does not teach a pit that is capable of holding a nucleus

isolated from the cell. First of all, the aim of the '128 device is not to remove a nucleus, but merely to allow injection of a parsimonious amount of fluid into the nucleus. US '128 teaches a well (14) that has a region (18) that is a counter-sunk conical upper section of the well (Col. 2, lines 28-31) and a *through-hole* (16) that is connected to a vacuum for exerting just enough vacuum to hold a cell in position on the upper section of the well, but not enough vacuum to rupture the cell wall. (Col. 5, lines 37-52). Since the through-hole is adjacent to the underside of the cell, the side that remains intact and is not ruptured, it is clear that the through-hole does not have any capability of receiving a nucleus. Even if the nucleus escaped after the injection, the nucleus would escape through the ruptured wall at the top of the cell, not through the intact cell wall on the underside of the cell. Further, the intact cell wall covering the through-hole would prevent the nucleus from entering. Thus, the design of the US'128 device does not include an enucleation pit capable of holding an isolated nucleus. Since the reference does not teach each of the recited limitations, it does not anticipate claim 104. Since dependent claims 105 and 106 incorporate the limitations of claim 104, they are not anticipated by US'128 either.

Furthermore, claim 105 recites an enucleation/nuclear transfer MEMS device wherein the well comprising an enucleation penetration member is an emitter. Claim 106 more specifically recites that the enucleation/penetration member is the emitter. The meaning of "emitter" is described in the specification as emitting electromagnetic signals or vibrational energy (page 70, lines 24-28). Indeed, new claims 139 and 140, dependent on claim 105 now recite these particular embodiments. The Examiner stated that the '128 patent comprises a plate (22) comprising a plurality of emitters (24, 40, 44). The components 24 and 40 in US '128 are each described as a needle; element 44 is described as a cavity in needle 40. (Col. 4, lines 6-12, Col. 6, lines 55-65). Nowhere, are these components described as emitters. Therefore, claims 105 and 106 are not anticipated by US'128 for the additional reason that US'128 does not teach the claimed emitters.

Claim 126 is rejected under 35 USC 102(b) as being anticipated by US Patent No. 5,526,376 (US'376). Applicant traverses the rejection.

Claim 126 has been amended to replace the "intended use language" with a functional limitation describing the device. Claim 126 recites a temporary securing means capable of

attaching to a spinner or driving means, wherein the centrifugal platter is readily connected to or detachable from the spinner or driving means. US '376 does not teach a securing means capable of attaching to a spinner or driving means in that manner. Further, claim 126 recites a plurality of ports capable of affixing the MEMS devices. US '376 does not teach ports capable of affixing MEMS devices. Therefore claim 126 is not anticipated by US'376. For all the above reasons, Applicant respectfully requests that the rejections under 35 USC 102 be reconsidered and withdrawn.

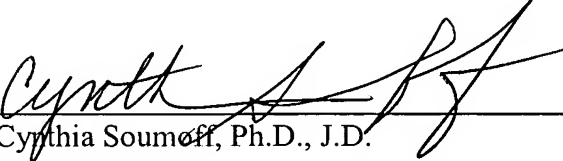
Allowable Subject Matter

Claims 107-112, 114-125, 127-136 were objected to as being dependent from a rejected base claim. However, claims 112, 114, 115, 117, 121, 127, 128, 130, and 133 are *independent* claims, therefore they should be allowable as is. Claims 116, 118-120, 122-125, 129, 131-132, and 134-135 are dependent on the aforementioned independent claims and thus should be allowable as is. Furthermore, Applicant believes that in light of the argument presented above, the rejection of claims 104-106 should be withdrawn, and this would moot the objection to claims 107-111, and 136. Alternatively, if the Examiner presents reasons that claims 104-106 are nonetheless not patentable, Applicant is willing to amend claims 107-111 and 136 to overcome the objection.

In view of the foregoing, Applicants submit that all pending claims are in condition for allowance and request that all claims be allowed. The Examiner is invited to contact the undersigned should he believe that this would expedite prosecution of this application. It is believed that no fee is required. The Commissioner is authorized to charge any deficiency or credit any overpayment to Deposit Account No. 13-2165.

Respectfully submitted,

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